

Trevor Spinoso

Machine Learning Software Engineer
Baton Rouge, LA — tspino2@lsu.edu — [GitHub](#) — [LinkedIn](#)

Professional Summary

Software engineer and applied researcher with experience building Python data pipelines and machine learning tooling on top of large, heterogeneous datasets. Published author with a track record of taking research prototypes from concept to production-ready, peer-reviewed tools. Comfortable across the full stack of modern data work: numpy/pandas, PyTorch/TensorFlow, SQL and NoSQL stores, REST APIs, Linux, and AWS.

Education

- **Master of Science, Computer Science** August 2023 – May 2025
GPA: 3.84
Louisiana State University, Baton Rouge
Focus: Cybersecurity and Digital Forensics
- **Bachelor of Science, Computer Science** August 2019 – May 2023
Minor: Mathematics — GPA: 3.50
Louisiana State University, Baton Rouge
Awards: President's List (Fall 2019), Dean's List (Multiple)

Experience

- **Researcher, BiT Lab** August 2023 – Present
Louisiana State University
 - Conducted data recovery and analysis at scale; built repeatable data processing workflows for structured and unstructured artifacts.
 - Collaborate with faculty and peers to develop innovative solutions for data recovery challenges.
- **Instructor, Computer Science Department** January 2024 – Present
Louisiana State University
 - Teach undergraduate courses in Computer Science.
 - Develop course materials, grade assignments, and mentor students in their academic growth.
- **Clean Cities University Intern** Summer 2023
Louisiana Clean Fuels
 - Built analysis workflows for statewide fuel-usage datasets; cleaned and transformed data to produce decision-ready insights.

Publications

- **PyMent: Venmo Forensic Analysis Tool (Published)** [Paper Link](#)
 - Analyzed vulnerabilities in Venmo through network traffic inspection and logical data acquisition.
 - Developed PyMent to bypass MFA and retrieve transaction histories by intercepting API calls and session tokens.
 - Highlighted systemic vulnerabilities in cloud-based fintech platforms, emphasizing the need for robust session management.
- **PyShot: Progressive Snapshot Forensic Analysis Tool (Published)** [Paper Link](#)
 - Developed PyShot, a Python-based tool to extract forensic data from Progressive's Snapshot app.
 - Demonstrated Snapshot's accuracy in recording speed/location data and exposed vulnerabilities in anti-forensic techniques.
 - Revealed detailed driving behaviors (e.g., dangerous maneuvers) unavailable via the mobile app interface.
- **Ex Machina: A Forensic Evaluation of AI Companion Applications (Published)** [Paper Link](#)
 - Conducted first cross-application forensic study of AI companion platforms totalling over 25M+ downloads.
 - Developed AI tool to profile the user based on the device artifacts.

Technical Skills

- **Programming Languages:** Python, Java, C++, JavaScript, SQL, Scala, Swift, Go
- **Frameworks & Libraries:** React.js, Flutter, Bootstrap, JUnit
- **Tools & Platforms:** Git, GitHub, VSCode, Android Studio, Unity, MATLAB, PyCharm
- **Other:** AWS, Agile/Scrum, Usability Testing, Privacy Policy, Requirement Analysis, Linux